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OBJECTIVES: End-stage renal disease (ESRD) poses a high medical and economic burden on healthcare systems. Information on direct medical costs for dialysis patients in Mexico is comparatively sparse. **METHODS:** Data was collected retrospectively on 40 patients on automated peritoneal dialysis (APD) and 40 patients on hemodialysis (HD) from institutional databases of two hospitals of the Mexican Institute of Social Security (IMSS). Patient follow up ranged from 3 months up to 67 months. Resources captured in the study were: medications, dialysis procedures, laboratory and diagnostic tests, hospitalizations and medical consultations, blood and hemoderivatives and catheter procedures. Drug and medical services costs were calculated using information from the Mexican Government website (http://web.compranet.gob.mx) based on 2010 fees. All costs were converted into US dollars (1USD = 12.54 Mexican pesos). **RESULTS:** Forty patients on peritoneal dialysis (APD, age 50 ± 15.6, 40% female) and 40 patients on hemodialysis (HD , age 47 ± 17.3 years , 42,5 % female). Total annual costs were: USD 12,589 (APD), USD 7,541 (PD). Dialysis: USD 1,058 (APD) , USD 13,739 (HD). Hospitalization: USD 6,212 (APD), USD 6,128 (HD). Medication: USD 5,043 (APD), USD 7,580 (HD). Costs for complications: USD 5,586 (APD) and USD 3,943 (HD). **CONCLUSIONS:** Dialysis patients either on peritoneal or hemodialysis present a high cost burden to the Mexican Health system. Medication and hospitalization costs constitute a major part of the total costs. Further investigations are needed to understand how to optimize care to avoid some of these costs.

PUK2

COST PER SUCCESSFUL RESPONSE OF STANDARD TREATMENT PLUS CINACALCET VERSUS STANDARD TREATMENT ALONE IN PATIENTS WITH SECONDARY HYPERPARATHYROIDISM IN MEXICO

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OBJECTIVES: Secondary Hyperparathyroidism (SHPT) is a common complication of chronic kidney disease. Abnormal levels of Parathyroid Hormone (PTH), Calcium (Ca) and Phosphorus (P) are associated with an increased risk of cardiovascular death and fracture. The aim of the study was to assess the cost per successful response with standard treatment (ST)+Cinacalcet versus ST alone (vitamin D sterols and chelated phosphates) in patients with SHPT in Mexico. **METHODS:** A decision analytic model was developed to calculate and compare the costs per successful response with Cinacalcet in adult patients with SHPT to whom a specific scheme of ST has been prescribed. The successful response was defined as the balance (normal levels) in all target parameters: PTH, Ca, P and Ca x P. ST was defined as one of the following combinations: Paricalcitol IV + Chelated Phosphate (PCP), Chelated Phosphate + Calcitriol (CPC) and Paricalcitol + Calcium Carbonate (PCC). Unit costs were gathered from the 2010 Official Price List of the Public Healthcare System in Mexico. **RESULTS:** According to the literature, 16% of patients achieve the targets in all parameters when ST is given. The addition of Cinacalcet increases this proportion up to 60%. Considering PCP as the ST, the cost per response was MXP$32,750 vs MXP$16,945 with Cinacalcet+PCP; CPC showed a cost per response of MXP$22,156 vs MXP$15,509 with Cinacalcet+CPC; finally, PCC reflected a cost per response of MXP$14,850 vs. MXP$12,091 with Cinacalcet+PCC. **CONCLUSIONS:** The addition of Cinacalcet to any ST combination represents a strategy which results to lower cost per responder principally due to two factors: the reduction of 50% in ST concomitant drugs and the higher response rates in achieving targets for all biochemical parameters.

PUK3

COST-EFFECTIVENESS OF ANEMIA TREATMENT IN DIALYSIS PATIENTS IN BRAZIL

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OBJECTIVES: This study sought to determine the cost-effectiveness of anemia treatment in dialysis patients for Brazilian Public Health System. Two alternatives were compared: a new drug, the *Continuous Erythropoietin Receptor Activator*, CERA, recently registred in Brazil, and another one, provided nowadays by the National Health System, Epo-rHu (Recombinant Human Eythropoietin). **METHODS:** A Markov cohort of dialysis patients treated with CERA and Epo-rHu for four years was used to perform the base case analysis. The model outputs were QALYs and costs. The quality of life associated with each drug was measured by interviews applied to health care professionals. These interviews were previously submitted and approved by the local ethics committee. A sensitivity analysis was applied to the model to test it, varying the values of drugs dosage, costs, discount rate and effectiveness. **RESULTS:** The average quality of life assigned by health care professionals to the patients treated with Epo-rHu, CERA and to kidney transplant receptors were respectively 6,3, 7,8 and 9,3. The model showed that Epo-rHu treatment was more cost-effective than CERA treatment. The cost-effectiveness ratio of Epo-rHu therapy was R$ 21.052,00. In addition, the cost per QALY gained of CERA therapy was R$ 72.974,00. **CONCLUSIONS:** Anemia treatment with CERA is associated with improvement in quality of life compared to Epo-rHu therapy. However, the new drug is not more cost-effective than the drug provided by the Brazilian Public Health System.

PUK4

COSTO-EFECTIVIDAD DE INTERVENCIONES PARA INSUFICIENCIA RENAL CRÓNICA TERMINAL EN MÉXICO

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OBJECTIVOS: Análisis de costo-efectividad en intervenciones para pacientes con insuficiencia renal crónica terminal (IRCT) en términos de los costos económicos de cada intervención, los años de vida ganados y la calidad de vida que generan tres alternativas comparables y mutualmente excluyentes: diálisis peritoneal continua ambulatoria (DPCA), la hemodiálisis (HD) y el trasplante renal (TR). **METODOLOGÍAS:** El diseño del estudio fue de tipo longitudinal. Los costos de cada intervención se determinaron mediante la técnica de manejo de caso promedio. Las medidas para evaluar los criterios de efectividad elegidos fueron la probabilidad de sobrevida y el Año de Vida Ajustado por Calidad (QALY, Quality-Adjusted Life Year) medido por el Indice de Rosser. **RESULTADOS:** Los costos de manejo anual de caso en US $ fueron: diálisis peritoneal $470.00, hemodiálisis $802.00 y trasplante $231,00. En cuanto a la efectividad, la sobrevida del injerto de trasplante renal resultó de 89,9% y 79,6% a uno y tres años respectivamente, mientras que los pacientes sometidos a DPCA tienen una sobrevida de 86,2% y 66,9% a un año y a tres años respectivamente. En cuanto a los QUALY's, los resultados para cada intervención fueron: DPCA 0,879; HD 0,864; y para el TR 0,978. **CONCLUSIONES:** La intervención más costo-efectiva resultó el trasplante renal con un coeficiente de 3088,69, seguido de la DPCA y la hemodiálisis, cuyos coeficientes fueron de 6416.95 y 11.147,68 respectivamente. Por lo tanto se recomienda promover y utilizar el trasplante renal como la intervención más costo-efectiva para pacientes con IRCT. Los resultados del coeficiente costo-efectividad identificado desde una perspectiva clínica y económica, constituyen un aporte relevante para la búsqueda y el logro de la eficiencia de los recursos que se asignan para producir servicios de salud para pacientes con IRCT, cuyas demandas están en competencia con otras enfermedades crónicas e infecto-contagiosas.

PUK5

ANÁLISIS COMPARATIVO DE COSTOS DEL TRATAMIENTO PARA LA ANEMIA RENAL CON METOXI POLIETILENGLICOL-ERITROPOYETINA BETA (MIRCERA®) VS. ERITROPOYETINA ALFA

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OBJECTIVOS: Evaluar si el uso de Metoxi polietilenglicol-eritropoyetina beta (MPG-beta) ofrece mejores resultados en salud y gasto con respecto a la eritropoyetina alfa. **METODOLOGÍAS:** Análisis de costo-efectividad incremental basado en un árbol de decisiones para simular los costos del tratamiento, con un horizonte temporal de 12 meses (costos en valor nominal). La dosis mensual de agentes estimulantes de la eritropoyesis se ajustó de acuerdo con los niveles de hemoglobina; sí la concentración es mayor a 12 g/dl 20,000 UI/mes de Eritropoyetina alfa o 0.6 mcg/kg/mes de MPG-beta, para 11-12 g/dl 26,00 0UI/mes de Eritropoyetina alfa o 1.2 mcg/kg/mes de MPG-beta y para concentraciones menores a 11 g/dl 32,000 UI/mes de Eritropoyetina alfa o 1.5 mcg/kg/mes de MPG-beta. Cada escenario tiene un costo basado en la atención habitual de estos pacientes. Los costos de los insumos se tomaron de las tarifas vigentes para 2010 aplicables a los servicios médicos proporcionados por el IMSS. Se evaluaron los riesgos de no estar en un intervalo ideal de Hemoglobina (11-12.5 g/dl), también conocido como excursiones de la hemoglobina y su costo asociado. **RESULTADOS:** MPG-beta mantiene en forma más estable la concentración de hemoglobina al compararse con Eritropoyetina alfa, de tal forma que a los 6 meses de tratamiento permanecen en el intervalo ideal 94% vs. 5% con Eritropoyetina alfa. Con el uso de Eritropoyetina alfa hay mayor riesgo de tener excursiones, y por consecuencia se incurre en mayores costos anuales (67,612 vs. 63,931). El análisis costo-efectividad incremental muestra un incremento de 83% en efectividad y un ahorro por paciente de 3,681 utilizando MPG-beta en comparación con Eritropoyetina alfa, esto derivado de la estabilidad de la hemoglobina. El ICER es de -12,901 unidades. **CONCLUSIONES:** Estos resultados demuestran que MPG-beta ofrece mejores resultados en salud y costos posesionándose como un tratamiento costo-ahorrador.